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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

H.C. Chan T-RAM, Inc.

100 Headquarters Drive San Jose, CA 95134-1370 02/19/2004

EXAMINER
TRAN, MAI HUONG C

ART UNIT

PAPER NUMBER

2818

DATE MAILED: 02/19/2004

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/666 220 | 09/19/2003 | Hyun-Jin Cho | C002-D-2 | 8470 |

TITLE OF INVENTION: STABILITY IN THYRISTOR-BASED MEMORY DEVICE

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | YES | \$665 | \$0 | \$665 | 05/19/2004 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing n applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

C mplete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissi ner for Patents P.O. B x 1450 Alexandria, Virginia 22313-1450

(703) 746-4000

or Fax INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 7590 02/19/2004 H.C. Chan Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile T-RAM, Inc. 100 Headquarters Drive transmitted to the USPTO, on the date indicated below. San Jose, CA 95134-1370 (Depositor's name) (Signature (Date) ATTORNEY DOCKET NO. CONFIRMATION NO FIRST NAMED INVENTOR APPLICATION NO. FILING DATE 09/19/2003 Hyun-Jin Cho C002-D-2 8470 10/666,220 TITLE OF INVENTION: STABILITY IN THYRISTOR-BASED MEMORY DEVICE **PUBLICATION FEE** TOTAL FEE(S) DUE DATE DUE ISSUE FEE APPLN. TYPE SMALL ENTITY 05/19/2004 \$665 \$665 \$0 nonprovisional **EXAMINER** ART UNIT **CLASS-SUBCLASS** 257-109000 TRAN, MAI HUONG C 2818 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single $\hfill \Box$ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) ☐ individual corporation or other private group entity ☐ government Please check the appropriate assignee category or categories (will not be printed on the patent); 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): ☐ Issue Fee ☐ A check in the amount of the fee(s) is enclosed. ☐ Publication Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _______ (enclose an extra copy of this form). ☐ Advance Order - # of Copies _ Deposit Account Number Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Date) (Authorized Signature) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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| APPLICATION NO. | FI | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|---|-----------|----------------------|------------------------|------------------|
| 10/666,220 | 66,220 09/19/2003 | | Hyun-Jin Cho | C002-D-2 | 8470 |
| | 7590 02/19/2004 | | | EXAMINER | |
| H.C. Chan T-RAM, Inc. | | | | TRAN, MAI HUONG C | |
| | 100 Headquarters Drive San Jose, CA 95134-1370 | | | ART UNIT | PAPER NUMBER |
| | | | | 2818 | |
| | | | | DATE MAILED: 02/19/200 | 4 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

| | | | AA. | | | |
|---|--|--|----------------------------|--|--|--|
| | Application No. | Applicant(s) | 1,000 | | | |
| | 10/666,220 | CHO ET AL. | | | | |
| Notice of Allowability | Examin r | Art Unit | | | | |
| | Mai-Huong Tran | 2818 | | | | |
| The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this applion of other appropriate communication IGHTS. This application is subject to | plication. If not include will be mailed in due | ed course. THIS | | | |
| 1. This communication is responsive to <u>9/19/03</u> . | | | | | | |
| 2. The allowed claim(s) is/are 18-21. | | | | | | |
| 3. The drawings filed on 19 September 2003 are accepted by | the Examiner. | | | | | |
| Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the: | 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| 1. Certified copies of the priority documents have | e been received. | | | | | |
| 2. Certified copies of the priority documents have | e been received in Application No | · | | | | |
| 3. Copies of the certified copies of the priority do | cuments have been received in this | national stage applica | tion from the | | | |
| International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * Certified copies not received: | | • • | | | | |
| Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78. (a) The translation of the foreign language provisional application has been received. Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included | | | | | | |
| in the first sentence of the specification or in an Application | Data Sheet. 37 CFR 1.78. | • | | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of | f this communication to file a reply co this application. THIS THREE-MOI | omplying with the requ NTH PERIOD IS NOT | irements noted EXTENDABLE. | | | |
| 7. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give | uitted. Note the attached EXAMINER es reason(s) why the oath or declara | 'S AMENDMENT or Nation is deficient. | OTICE OF | | | |
| 8. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No (b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner. (c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No | | | | | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d). | | | | | | |
| 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | | | | | |
| Attachm nt(s) | | | | | | |
| 1⊠ Notice of References Cited (PTO-892) | 5☐ Notice of Informal Pa | atent Application (PTC | -152) | | | |
| 2 Notice of Draftperson's Patent Drawing Review (PTO-948) | 6☐ Interview Summary (| PTO-413), Paper No. | · | | | |
| 3 Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No | · Lammer 3 Amenda | | | | | |
| 4 Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8⊠ Examiner's Statemer | nt of Reasons for Allov | vance | | | |
| | Cff | | | | | |
| | David Nelms Supervisory Patent Examinar | | | | | |
| Technology Center 2800 | | | | | | |

DETAILED ACTION

Examiner's Amendment.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Cancel claims 1-17 and 22-34.

Reason for allowance

The following is an examiner's statement of reason for allowance: None of the references of record teaches or suggests the claimed Stability in thyristor-based memory device having a capacitively-coupled control port and means for shunting low-level current at a first base region.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Application/Control Number: 10/666,220

Art Unit: 2818

Conclusion

Page 3

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mai-Huong Tran whose telephone number is (571)-272-1796. The examiner can normally be reached on Monday-Thursday 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9319.

Mai-Huong Tran

Øavid Nelms Supervisory Patent Examiner Technology Center 2800